Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _29 October 2007_.

2a)☐ This action is **FINAL**.　　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-9,11,13,14,16,18,22 and 24-29_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-9,11,13,14,16,18,22 and 24-29_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some *　c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 10/29/2007 has been entered.

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are

moot in view of the new ground(s) of rejection. The Examiner points out that many of the

elements that applicant argues render the claims patentable over the prior art of record are, at

best, vaguely defined by the applicant's specification.

For example, thought the claim is now amended to be limited to an optical network, there

is nothing in the applicant's specification that limits the claimed invention towards an optical

network. The only mention of an optical network is on page 6, lines 3-9 of the specification

which states that the invention can be implemented on optical network elements but are not

limited to any particular environment. In other words the use of the claimed invention seems to

be no more than an obvious design choice because the particulars of the type of network are not

important to the invention. If these details were important the applicant would have had to

disclose them in order to enable the claimed invention.

The only description of the claimed "network independent module" is on page 8, lines 4-6, which states that, "Network element independent modules provide functions for managing different types of network elements. In other words, the functions provided by network elements independent modules 153 are generic to the network element type". This definition of a "network independent module" can literally be interpreted as any network communication protocol, for example.

The "network dependent module" provides functions that support both network element dependent functionality and network element dependent communications protocols according to page 8, lines 8-10 of the specification. This broad definition can be interpreted any number of ways.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-8, 14, 16, 18, and 27-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 5-8 and 27-29 are directed towards a system that is comprised of a network element independent module, a network element dependent module, and a network management application. Since these elements are disclosed as software the system of claims 5-8 and 27-29 is treated as software per se and therefore does not fit into any of the statutory categories of invention. Though claims 27 and 28 do mention hardware elements, these elements are not

positively recited as being part of the claimed system and therefore do not render the claims statutory.

Claims 14, 16, and 18 are directed towards a system comprising means for performing functions related to the invention. Since the applicant does not define any separate hardware for performing any of the claimed functions, it can only be assumed that the claimed means are directed towards the software of the system. Software does not fit into a statutory category of invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are:

In claim 14, the system comprises two conditional statements that perform part of a process. The missing elements are the entities which perform these conditional statements.

In claim 16, the system further comprises sending. The missing element is the entity that performs this sending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 11, 13, 14, 16, 18, 22, and 24-29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent Number 6,260,062 to Davis et al. in view of U.S. Patent

Application Publication Number 2002/0161883 by Matheny et al.

As to claim 1, Davis teaches a method of managing network elements in an optical

network (col. 4, lines 40-52 and col. 7, lines 15-26) comprising: providing a network element

independent module that includes functions for managing different types of network elements

(col. 5, lines 40-49); providing one or more network element dependent modules that include

functions for a specific type of network element and is in communication with the network

element independent module (col. 5, lines 50-65); providing a network management application

that is in communication with the network element independent module and calls the functions

of the network element independent and dependent modules to manage a plurality of network

elements in a network (col. 5, lines 40-65, the EMS is the management application); receiving at

the node a message indicating that there is a new network element in the network (col. 13 lines

53-col. 14, line 29); initializing the network element independent module for the new network

element (col. 13 lines 53-col. 14, line 29); determining if the new network element corresponds

to one of the network element dependent modules accessible by the network management

application (col. 13 lines 53-col. 14, line 29); utilizing one of the network element dependent

modules to manage the new network element if the new network element corresponds to one of

the network element dependent modules (col. 13 lines 53-col. 14, line 29); and receiving and

storing a new network element dependent module if the new network element does not

correspond to one of the network element dependent modules accessible by the management

application (col. 13 lines 53-col. 14, line 29); wherein the new network element dependent

module, network element independent module and network management application are stored at

the node so that the node is operable to communicate directly with the new network element (col.

13 lines 53-col. 14, line 29); however Davis does not explicitly teach the step of sending a

request to the new network element for information about the new network element. Instead

Davis states that such information can be obtained from vendors, the Internet, or by "means

generally known to those of ordinary skill in the art" (col. 7, lines 29-37).

Matheny teaches a method of managing network elements in an optical network

(paragraph 9) comprising: providing a network element independent module that includes

functions for managing different types of network elements (paragraph 11, the discovery agents

read on the network independent modules); providing one or more network element dependent

modules that include functions for a specific type of network element and is in communication

with the network element independent module (paragraphs 16-18, the XML files are the network

element dependent modules); providing a network management application that is in

communication with the network element independent module and calls the functions of the

network element independent and dependent modules to manage a plurality of network elements

in a network (paragraph 19, the network manager 104); receiving at the node a message

indicating that there is a new network element in the network (paragraph 21, devices are

discovered, therefore message about new elements are received); sending a request to the new network element for information about the new network element (paragraph 23, the discover agent collects data from the devices); initializing the network element independent module for the new network element (paragraph 21, the discovery is considered an initialization); and determining if the new network element corresponds to one of the network element dependent modules accessible by the network management application (paragraph 26).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Davis regarding the management of device independent and dependent functions with the teachings of Matheny regarding the retrieval of network element dependent modules directly from a device because Davis suggests that any "means generally known to those of ordinary skill in the art" can be used to obtain such information. Retrieving information directly from a device, as shown by Matheny is "means generally known to those of ordinary skill in the art".

As to claim 2, Matheny teaches a method wherein the functions of the network element dependent module are executable at run time through dynamic class loading (paragraphs 16-18).

As to claim 3, Matheny teaches a method wherein the network element dependent module includes specifications of the network element (paragraphs 16-18).

As to claims 4 and 29, Davis teaches a method wherein the specification includes a graphical representation of the network element (col. 16, lines 44-55).

As to claims 5-8, they are directed towards a system that corresponds to the method of claims 1-4 and are therefore rejected for the same reasoning.

As to claims 9, it is rejected for the same reasoning as claim 1.

As to claim 11, Matheny teaches a method comprising sending a request to the network element for the software version of the network element (col. 13, line 53-col. 14, line 29).

As to claim 13, Davis teaches a method comprising receiving an object change message that there is a new network element on the network (paragraphs 16-18).

As to claims 14, 16, and 18, they feature the same limitations as claims 9, 11, and 13 and are rejected for the same reasons as claims 9, 11, and 13.

As to claim 19, Matheny teaches the method of claim 1 further comprising receiving a packet identifying a new network element and sending an object change message to inform the network management application that there is a new network element (paragraphs 16-18).

As to claim 22, Matheny teaches the method of claim 1 further comprising receiving a message indicating a topology change in said network and identifying said new network element (paragraphs 16-18 and 24-26).

As to claims 24 and 25, Davis teaches a method a wherein network element dependent modules support network element dependent communication protocols that are management protocols (col. 13, line 53-col. 14, line 29).

As to claim 26, The Davis-Matheny combination does not explicitly teach the use of HTTP messages. Official notice is taken that the use of HTTP messages was well known at the time of the applicant's invention. It would have been obvious to combine the teachings of the Davis Matheny combination with HTTP messages because arbitrarily sending an HTTP message in a computer network would produce a predictable result if combined with either Davis or Methany.

As to claims 27 and 28, Davis and Matheny teach the node as a router or switch or edge devices (As shown they both relate to "optical networks" and therefore the components of such networks).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is (571) 272-3893. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Douglas Blair